Selecting and Training Contact Tracers to Address Minority Health Disparities: Lessons from COVID-19

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Minority Health Disparities in COVID-19

- Individuals from minority groups are at increased risk of COVID-19
  - Over-represented in frontline worker positions
  - Concentration in more crowded, urban areas
  - Underlying comorbidities

- Manifestation of larger health disparity issues
  - Healthcare access and quality
  - Systemic racism has compromised trust of minority communities
  - Health literacy
Deterrents of COVID-19 Need to be Equitable

- Public health measures, including:
  - safety guidelines
  - contact tracing
  - vaccination

- Broader healthcare access and quality

- Interactions with healthcare professionals, government officials, and systems

- *The public health/healthcare workforce is really important! Including contact tracers*
Pandemic Workforce?

Need for a “Contact Tracer Army” of at least 100,000 people (Watson et al., 2020)

Does Your State Have Enough Contact Tracers To Control Its Outbreak?

**CORONAVIRUS BY THE NUMBERS**

Coronavirus Cases Are Surging. The Contact Tracing Workforce Is Not

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SELENA SIMMONS-DUFFIN
Research Need & Purpose

- **Research Gap:** Lack of consideration for the science of personnel psychology in developing a well-skilled, and well-trained workforce to work effectively in minority communities.

- **Research Goal:** To provide recommendations for efficiently, fairly, and validly selecting and training contact tracers to address future public health crises and to effectively work within minority communities.
Scientific analysis of a job role (i.e., Job Analysis) helps to identify:

- Essential job functions and tasks
- Critical Knowledge, Skills, Abilities, & Other characteristics (KSAOs) for successful:
  - job performance
  - work with minority communities

Distinguish KSAO’s needed pre-hire and post-hire

- Guides *selection* (pre-hire) and *training* (post-hire)
Our Research

1. Large-scale survey from the perspective of community members

2. Job Analysis of Contact Tracer to identify KSAOs critical for working with minority populations
Our Findings: Study 1 - Survey

- Participant recruitment on Prolific to administer survey
  - $N = 531$
    - 27.58% AAPI
    - 24.02% White
    - 20.45% Black
    - 19.70% Hispanic/Latinx
    - 8.26% Other/Mixed
  - 48.21% female, 51.04% female
  - Age $M = 30.74$ (SD = 10.69)
  - 58.76% Employed
  - 68.63% Tested for COVID
Our Findings: Study 1 - Survey

Trust in Healthcare Providers → Trust in Contact Tracers
  0.44**

Trust in Government Officials → Trust in Contact Tracers
  0.32**

Health Literacy → Knowledge about Contact Tracing
  0.15*

Political Conservatism → Knowledge about Contact Tracing
  -0.28**

Knowledge about Contact Tracing → Likelihood of Compliance w/ Contact Tracing
  0.14**

Trust in Contact Tracers → Likelihood of Compliance w/ Contact Tracing
  0.39**

All indirect effects significant $p < 0.05$

$R^2$ of CT compliance = 0.36, SE = 0.04
Our Findings: Study 1 - Survey

- Qualitative data: *What would make it more likely that you would follow a contact tracer’s guidance? What would help you trust and listen to them?*
  - Clear explanations of tracers’ motives, authority, and data confidentiality/privacy
  - Basics about COVID-19 and the effectiveness of deterrents like contact tracing
  - Communication that is kind, respectful, and compassionate (not threatening or punitive)

- Two key determinants to willingness to comply with contact tracing requests
  - Trust in contact tracers
  - Knowledge about CT and COVID-19

- Contact tracer KSAO’s may help increase compliance, including in minority populations
Our Findings: Study 2 – Job Analysis

- Structured interviews; responses transcribed and coded
  - N = 15
  - 53.30% Male
  - 46.67% White
  - Age M = 36.93 (SD = 16.04)
  - 10 current CT, 3 previous CT, 2 CT supervisors
Our Findings: Study 2 – Job Analysis

KSAOs contact tracers said they needed to effectively work with minority community members:

- Knowledge of HIPAA, state, and local health regulations
- Knowledge of community health impact
- Active listening skills
- Complex problem solving skill
- Cultural sensitivity skill
- Empathy/compassion
Conclusions & Implications

- Clear overlap between what community members want from public health workers and what those workers say they need to work with minority groups

- **CT Selection** should emphasize:
  - Abilities: complex problem solving, oral communication
  - Knowledge: communicable disease spread, community health, HIPAA
  - Other/Personality: empathy/compassion

- **CT Training** should emphasize:
  - Knowledge: disease specifics, health regulations, available resources
  - Skill: Active listening, cultural sensitivity

- *These should be put in place now to help prepare for future pandemic response*
Thank you!

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